

Unmanned Aircraft System (UAS) Post Processing - Hands On

When: March 1-3, 2016 - Tuesday & Wednesday, 3:15-5:00 p.m.

Where: G30 IE

Instructors: Jeff Sloan and Joe Adams, U.S. Geological Survey National UAS Project Office

Content: This session will cover the basics of processing natural color and multispectral image data collected on a UAS using structure-from-motion (Agisoft PhotoScan) software to create geo rectified point clouds, digital surface models and orthophotography.

Objectives:

- Understand how to acquire UAS data for best results and what to do with the collected data to make useful geospatial data
- Understand how to align images collected on the UAS
- Understand how to create sparse and dense point cloud data
- Understand how to create a digital surface models
- Understand how to create a digital orthophotos
- Understand how to process multi-band multispectral data

Prerequisites: None

Instructor Biographies

Jeff Sloan – USGS UAS National Project Office Lead

Jeff Sloan has worked in many areas of cartography, GIS, photogrammetry, and remote sensing in the U.S. Federal Government for the past 30 years including work at the Dept. of Defense, Dept. of Homeland Security and the Dept. of the Interior. He has utilized unmanned aircraft systems since the USGS National Project Office was established in 2008. He earned degrees from the University of Northern Iowa and graduate work in Geographic Information Systems at the University of Denver in Denver, Colorado.

Joe Adams – USGS UAS National Project Office

Joe Adams started his career in the IT realm in 1985. Since 1992, Joe has been a systems/network administrator for several Dept. of the Interior agencies including BIA, BLM, and USGS. Joe joined the USGS National UAS Project Office full time in January 2016. Along with being a UAS operator, Joe will focus on data life cycle and management developing end-user tools to solve data collection, processing, metadata, and workflow pain points.